VIDALING

Appl. No. 10/590,362

Atny. Ref.: 960-50

Amendment After Final Rejection

August 19, 2009

## **AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows:

1. (Currently Amended) A chromatography column comprising an enclosure, a

first port and a second port, said enclosure beingconfigured to put the enclosure in

communication with a tank via said first port and with a pump via said second port, said

tank comprising a dry chromatography resin made of particles having a size distributed

between a minimum size and a maximum size, and a second port configured to put the

enclosure in communication with a pump.

wherein [[the]]said first port forms a passage having a minimum section which is

at least 10 000 times as large as a particle section corresponding to the maximum size

particles.

2. (Previously Presented) The chromatography column of claim 1, wherein the

enclosure, when in use, extends vertically between a bottom and a top, the second port

being located above the first port.

3. (Previously Presented) The chromatography column of claim 1, wherein the

first port is provided with an inlet valve having a minimum section which is at least 10

 $000\ times$  as large as the particle section corresponding to the maximum size particles.

4. (Currently Amended) A chromatography column comprising:

an enclosure, a first port and a second port.

- [[a]]said first port being provided with an inlet valve, configured to put the

enclosure

- said enclosure being in communication with a tank via said inlet valve and with

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a pump via said second port, said tank comprising a dry chromatography resin made of particles having a size distributed between a minimum size and a maximum size, and

-a second port configured to put the enclosure in communication with a pump, wherein [fthel]said inlet valve comprises a chamber, an inlet duct and a piston.

- the chamber communicating with the enclosure through a first aperture.
- the inlet duct communicating with the chamber through a second aperture and being adapted to be connected to the tank, and
- the piston being movable in the chamber between a closing position, where
  it closes the first and second apertures, and an opening position, where it opens the first
  and second apertures and it lets free substantially all the space of the chamber
  between the first and second apertures.
- (Previously Presented) The chromatography column of claim 4, wherein the enclosure, when in use, extends vertically between a bottom and a top, the second port being located above the first port.
- 6. (Currently Amended) The chromatography column of claim 4, wherein the valve defines a passage between a pipe adapted to be connected to the <u>inlet</u> duct and the enclosure, said passage having a minimum section which corresponds to the section of any of the first and second apertures.
- 7. (Original) The chromatography column of claim 6, wherein the minimum section of the passage is at least 10 000 times as large as the particle section corresponding to the maximum size particles.
  - 8. (Previously Presented) The chromatography column of claim 4, wherein the

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piston when in closing position has an end surface with a tapered shape, said end  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1$ 

surface having a portion which is flush with the internal surface of the enclosure.

9. (Previously Presented) The chromatography column of claim 1, wherein the

first port forms a passage having a minimum section corresponding to at least a

minimum internal diameter of 20 mm.

10. (Withdrawn) A module for loading a chromatography resin into a

chromatography column of claim 1, said module comprising said chromatography

column and a pump connected to the second port through a pipe.

11. (Withdrawn) The module of claim 10, further comprising a tank for

chromatography resin, said tank being connected to the first port

12. (Withdrawn – Currently Amended) A method for loading a chromatography

resin into a chromatography column comprising an enclosure, a first port and a second

<u>port,, said\_to-put the</u> enclosure <u>being</u> in communication with a tank <u>via said first port</u>

and with a pump via said second port, said tank comprising chromatography resin

particles having a size distributed between a minimum size and a maximum size,  $\frac{\mbox{\sc and a}}{\mbox{\sc and a}}$ 

second port, to put the enclosure in communication with a pump,

wherein [[the]]said\_first port forms a passage having a minimum section which is

at least 10 000 times as large as a particle section corresponding to the maximum size

particles.

13. (Withdrawn - Currently Amended) The method of claim 12, wherein said

column, comprises an enclosure having a first port and a second port, and said method

comprising pumping [[a]]said dry chromatography resin from a resin said tank into the

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enclosure through the first port, via [[a]]said pump connected to [[a]]the second port.

14. (Withdrawn) The method of claim 12, wherein the

vacuum pressure in the enclosure is between -100 kPa and - 50 kpa.

15. (Withdrawn - Currently Amended) The method of claim 12, wherein the

enclosure, when in use, extends vertically between a bottom and a top, the second part

port being located above the first port.

16. (Withdrawn - Currently Amended) A method for unloading a

chromatography resin mixed with a liquid, from a chromatography column into a

chromatography column comprising an enclosure, a first port and a second port, said -

to put the enclosure being in communication with a tank via said first port and with a

pump via a second port, said tank comprising chromatography resin particles having a

size distributed between a minimum size and a maximum size, and a second port, to

put the enclosure in communication with a pump,

wherein [[the]]said\_first port forms a passage having a minimum section which is

at least 10 000 times as large as a particle section corresponding to the maximum size

particles.

17. (Withdrawn – Currently Amended) The method of claim 16, wherein said

 $\underline{\text{chromatography}}\, \text{column comprises } \underline{\text{an enclosure having}}\, \text{a high port located above a low}$ 

port, this method comprising successively the steps of

a) pumping the liquid from the enclosure through the low port,

b) drying the chromatography resin comprised in the enclosure, and

c) pumping the dried resin through the low part.

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- 18. (Withdrawn) The method of claim 16, wherein the vacuum pressure in the enclosure is between -100 kPa and -50 kPa.
- 19. (Withdrawn) The method of claim 17, further comprising between steps b) and c) injecting a gas through the low port.
- (Withdrawn) The method of claim 17, in which step b) comprises injecting a hot gas through the high port.
- 21. (Withdrawn) The chromatography column of claim 4, wherein the first port forms a passage having a minimum section corresponding to at least a minimum internal diameter of 20 mm.
- 22. (Withdrawn) A module for loading a chromatography resin into a chromatography column of claim 4, said module comprising said chromatography column and a pump connected to the second port through a pipe.